

# CHAPTER 11

## HEALTH AND HUMAN SERVICES

### I. INTRODUCTION

The Health and Human Services Chapter describes health in the county, contributing physical and environmental factors to health, and services designed to increase county-wide health. The Health and Human Services Chapter also sets policies to address the changing conditions of Thurston County.

The way our community develops affects our health and the environment. Opportunities to engage in healthier behaviors are constrained or supported by how areas such as cities or towns are built over time. For example, the steady increase in childhood obesity closely mirrors the patterns of school siting and design over the last fifty years – with larger school campuses in more remote locations, often in places without the infrastructure to support walking from the nearest residences served by the school. As a result, fewer and fewer students have the option of being active (walking or bicycling) for their travel to and from school.

In order for community development to promote good health for our residents, the policies that guide development and manage growth should consider health implications. The purpose of this chapter is to define those implications and to plan for the environments that will meet the needs of current and future Thurston County residents while preventing disease and keeping our local population as healthy as possible.

#### 2020 Update: Critical Issues

- Encouraging land use development that emphasizes urban density and infill to create walkable communities;
- Strengthening collaboration across the partners, agencies and programs that address housing needs, provide emergency shelters and treat homelessness;
- Expanding access to, and the quality of, local healthcare services; and
- Protecting the environment, especially from water and air pollutants.
- Commit to achieve health equity and a course of action that reduces, and ultimately eliminates, health disparities so that optimal health for all is possible and that differences in life and health outcomes cannot be predicted on the basis of race.

### GROWTH MANAGEMENT

The Health and Human Services element is not required by the GMA. However, Essential Public Facilities (solid waste handling facilities, mental health facilities, inpatient facilities, etc.) must be included in Comprehensive Plans. These Essential Public Facilities are discussed in Chapter 2 Land Use.

- Public facilities and services. Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards.

RCW 36.70A.020(12)

**KEY FACTS: HEALTH AND HUMAN SERVICES****THURSTON COUNTY RESIDENTS MAINLY RELY ON GROUNDWATER FOR DRINKING**

As of December 2017, there are approximately **543 Group B** (2-14 service connections or serving a population of less than 25/day) and **303 Group A** (15 or more service connections or serving 25 or more people/day for 60 or more days per year) active public water systems.

**THURSTON COUNTY HAS 53,000 ON-SITE SEWAGE SYSTEMS**

The proper installation, use, maintenance and treatment of these systems is vital to water quality.

**THURSTON COUNTY YOUTHS HAVE A HIGHER RATE OF CIGARETTE USE THAN THE STATE AVERAGE**

Cigarette smoking is higher than the state average for Thurston County youths. One percent of 6<sup>th</sup> graders, four percent of 8<sup>th</sup> graders and nine percent of 10<sup>th</sup> graders smoke cigarettes. Reducing tobacco use is an effective way to increase community health.

**CONTAMINATED SITES ARE GETTING CLEANED**

In 2009, there were 193 contaminated sites in Thurston County as identified by the Department of Ecology. There are 179 as of 12/23/19.

**URBAN FARMING CAN PROVIDE ACCESS TO HEALTHY FOOD**

Land Use Planning influences the ability of people living in urban areas to conduct small-scale agriculture. Promoting urban agriculture increases access to healthy food.

**HEALTH OUTCOMES ARE WORSE FOR THE THURSTON COUNTY BIPOC (BLACK, INDIGENOUS, PEOPLE OF COLOR) POPULATION COMPARED TO WHITE RESIDENTS**

Specific health outcome measures are worse for Thurston County BIPOC (black, indigenous, people of color) residents compared to White residents. In 2018, the life expectancy of Black residents was 76 years compared to 80 for White residents. In addition, between 2014 and 2018, infant mortality for Black infants was 9.9 per 1,000 compared to 4.4 per 1,000 for White infants.



*Thurston Thrives, 2018. Water is a valuable resource used in a wide range of community functions; industry, commerce, agriculture and most importantly drinking water. Clean water is vital to community health.*

## II. PLANNING CONTEXT FOR HEALTH AND HUMAN SERVICES

### A. COUNTY WIDE PLANNING POLICIES

- 1.3 Develop new ways to cultivate and support respectful civic engagement and participation by residents, and public, private, and nonprofit businesses and organizations, encouraging choices and offering information that contribute to individual, household, and community health and well-being.
- 1.8 Partner across topic areas and jurisdictional boundaries. While supporting local decision making, encourage regional and cross-jurisdictional coordination, communication, and cooperation that increase our capacity to make decisions for the common good across jurisdiction boundaries.
- 1.10 Meet basic human needs of clean water and air, healthy food, adequate housing, quality education, public safety, and equal access, regardless of socio-economic status.
- 1.11 Support education, employment, commercial opportunities, cultural, social, and recreational opportunities in appropriate places and at a scale that supports community health and well-being.
- 1.12 Champion energy efficiency and renewable energy strategies that contribute to energy independence, economic stability, reduced climate impacts, and long-term household and community health.
- 3.2. Coordinate Urban Services, Planning, and Development Standards through:
  - a. Maximizing the use of existing infrastructure and assets, and leveraging the value of these in building vital, healthy, and economically viable communities.
  - g. Phasing extensions of urban services and facilities concurrent with development and prohibiting extensions of urban services and facilities, such as sewer and water, beyond urban growth boundaries except to serve existing development in rural areas with public health or water quality problems.
- 5.1 Cooperatively establish a process for identifying and siting within their boundaries public capital facilities of a county-wide and state-wide nature which have a potential for impact beyond jurisdictional boundaries. The process will include public involvement at early stages. These are facilities that are typically difficult to site, such as airports, terminal facilities, state educational facilities, state or regional transportation facilities, state and local correctional facilities, solid waste handling facilities, and in-patient facilities including substance abuse facilities, mental health facilities, and group homes.
- 7.5 Build a vital, diverse and strong local economy, including job opportunities that support community and household resilience, health, and well-being, by:
  - e. Encouraging the development of local services for food, clothing and other basic human needs.
  - i. Connecting economic health with personal health and well-being and the advancement of environmental health.

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**B. REGULATORY AUTHORITY**

The authority of the County to do the work of protecting the public's health and safety is established by the laws of Washington State.

**Revised Code of Washington (RCW) 70.05.060**

This RCW establishes the powers and duties of the local Board of Health. In Thurston County, the Board of County Commissioners also serve as the County Board of Health. The difference between the two boards is that the Board of Health has authority to enforce the state's public health laws and rules established by the state board of health and secretary of health throughout the entire county. This jurisdiction includes the cities within the county. In contrast, the Board of County Commissioners only has jurisdiction of the unincorporated parts of the County.

The RCW states that the Board of Health shall:

- Enforce through the local health officer or the administrative officer appointed under RCW 70.05.040, if any, the public health statutes of the state and rules promulgated by the state board of health and the secretary of health;
- Supervise the maintenance of all health and sanitary measures for the protection of the public health within its jurisdiction;
- Enact such local rules and regulations as are necessary in order to preserve, promote and improve the public health and provide for the enforcement thereof;
- Provide for the control and prevention of any dangerous, contagious or infectious disease within the jurisdiction of the local health department;
- Provide for the prevention, control and abatement of nuisances detrimental to the public health.

The RCW goes on to note that the Board of Health also has the responsibility to make reports to the state board of health and to set fees for services authorized by law or the state board of health.

**Revised Code of Washington (RCW) 70.05.070**

A subsequent section, RCW 70.05.070, describes the powers and duties of the local health officer, reinforcing that this is a means for the board of health to meet its responsibilities. It also adds some specific means of accomplishing public health duties, a selection of which are included here:

- Inform the public as to the causes, nature, and prevention of disease and disability and the preservation, promotion and improvement of health within his or her jurisdiction;
- Prevent, control or abate nuisances which are detrimental to the public health;
- Collect such fees as are established by the state board of health or the local board of health for the issuance or renewal of licenses or permits or such other fees as may be authorized by law or by the rules of the state board of health;
- Inspect, as necessary, expansion or modification of existing public water systems, and the construction of new public water systems, to assure that the expansion, modification, or construction conforms to system design and plans;
- Take such measures as he or she deems necessary in order to promote the public health, to participate in the establishment of health educational or training activities, and to authorize the attendance of employees of the local health department or individuals engaged in community health programs related to or part of the programs of the local health department.

### III. BACKGROUND AND CONTEXT

There are important links between health and the built, natural and community environments. These links are reflected in the comprehensive plan to address the need to protect and promote resident health and safety. They also allow Thurston County to accelerate opportunities to promote the public's health. While all parts of the Comprehensive Plan intersect with health objectives, the elements most connected with achieving health objectives include: Housing, Land Use, Natural Environment, Natural Resource Lands, and Transportation.

#### A. DETERMINANTS OF HEALTH

Our health is affected by a number of factors, known as determinants of health. Understanding these factors helps us to identify the opportunities to achieve disease prevention and health promotion objectives through community planning.

Addressing these determinants of health in the Comprehensive Plan is important because laws and policies are crucial to creating a county where everyone has the opportunity to attain their full health potential.

##### **Clinical Care**

A person's access to quality health services affects health outcomes. Whether a person has insurance also influences access to care. Clinical care also includes access to emergency services.

##### **Behavioral**

In addition to a person's genes, behavior greatly affects health. For example, smoking cigarettes increases the risk for lung cancer.<sup>1</sup> Supporting people in making choices and taking actions that reduce negative consequences of some behaviors can help to achieve optimal health outcomes.

##### **Environmental**

The physical surroundings where we live have a direct effect on health and also affect it by shaping our behavior. Heavy industrial areas can produce hazardous air pollutants. People exposed to toxic air pollutants at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects.<sup>2</sup>

##### **Social**

The economic and educational conditions in which we live affect health outcomes.<sup>3</sup> Examples of these conditions include: income, gender, type of work, and access to quality food. These conditions are shaped by the amount of money, power and resources that people have. These conditions are influenced by policy choices.

The determinants of health are diagramed on the following page.

<sup>1</sup> Centers for Disease Control and Prevention, What Are the Risk Factors for Lung Cancer, 2018

<sup>2</sup> Environmental Protection Agency, Health and Environmental Effects of Hazardous Air Pollutants, 2018

<sup>3</sup> Centers for Disease Control and Prevention, NCHHSTP Social Determinants of Health, 2018

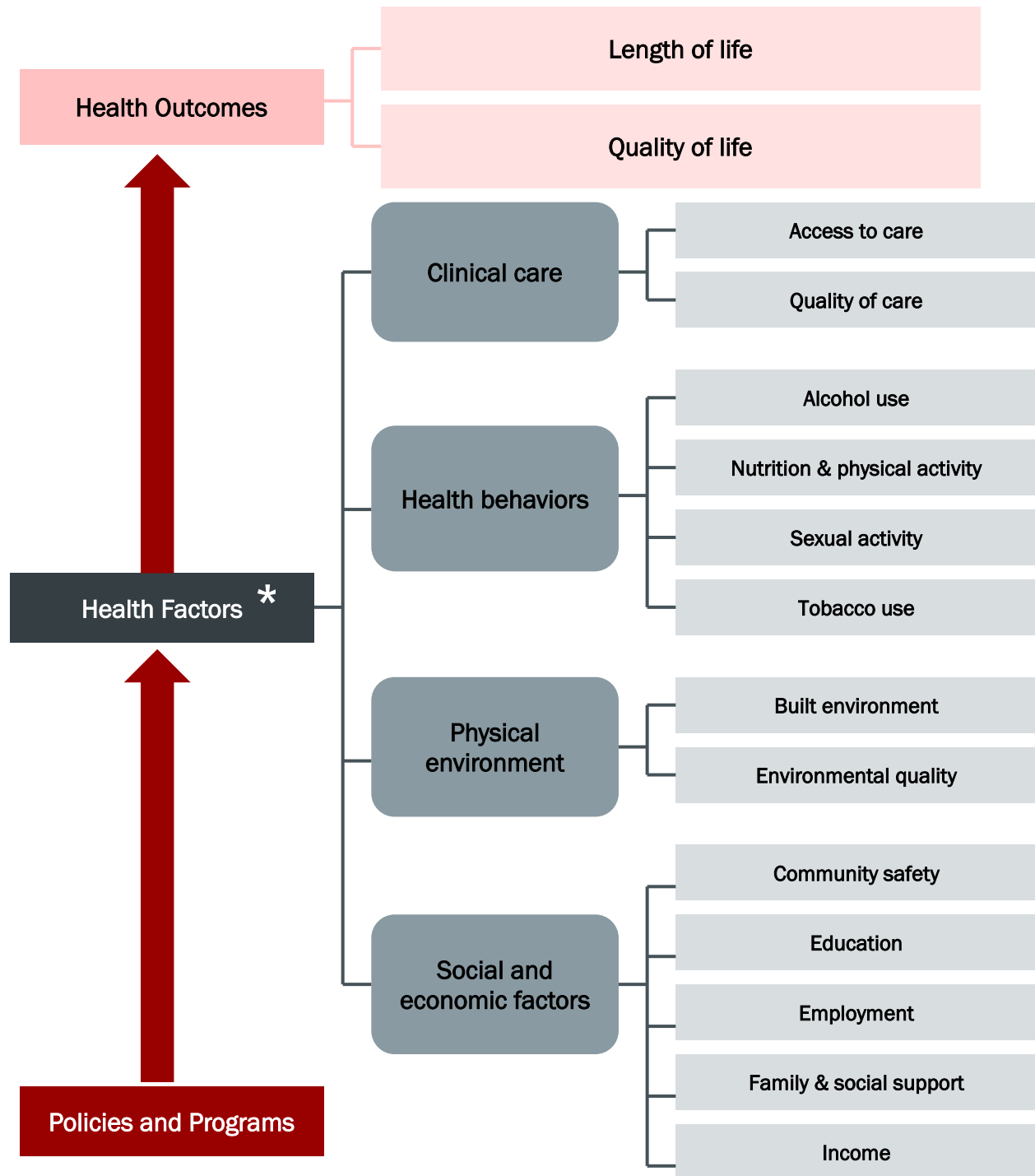


Figure 11-1. County Health Rankings Model.

SOURCE: ADAPTED FROM UNIVERSITY OF WISCONSIN POPULATION HEALTH INSTITUTE 2012.

\* Model takes as given various significant factors in the health of a community, such as the availability of antibiotics, clean drinking water and sanitary wastewater disposal, immunizations, etc. The County Health Rankings Model also does not include the full set of factors in each area. For instance, other substances besides alcohol and tobacco impact the health of the population. Further, it is particular levels or forms of the health behaviors listed here that raise or lower the risk of disease or early death.



## B. CURRENT UNDERSTANDING OF INTERACTIONS BETWEEN BUILT ENVIRONMENT AND HEALTH

Communities at every scale realize the interaction between planning and health. The National Prevention Strategy (2011) lays out a long-range strategic plan for ensuring a healthier population across the nation. It focuses, like this chapter, on the leading causes of death and their causes. The strategy promotes healthy communities through the collaboration of different planning sectors.

### **Access to Healthy Food**

The nutrition environment, from how close by grocery stores are to neighborhoods where many people live to the menus of restaurants and other food service establishments, constrains or enhances the choices of healthier, nutrient-rich foods available to local residents. Typically, there are three times as many supermarkets per capita in upper and middle-income neighborhoods as in low-income neighborhoods.<sup>4</sup>

Access to healthy food can be improved by allowing or encouraging features like community gardens, farmers markets, etc., as well as through governmental and private-sector policies. Land Use Planning (Chapter 2 Land Use) influences the ability of people living in urban areas to conduct small-scale agriculture. Promoting urban agriculture increases access to healthy food.

### **Communities for Physical Activity**

Physical activity fosters normal growth and development, can reduce the risk of various chronic diseases, and can make people feel better, function better, and sleep better.<sup>5</sup>

Creating or modifying environments to make it easier for people to walk or bike helps increase physical activity. The availability of active and walkable places such as destinations, parks, sidewalks and trails near where people live and work, increases physical activity. It takes a comprehensive planning approach to create a physically active community. Transportation, housing, safety, and environmental elements must all be in harmony. Density and mixed use developments bring more destinations within reach of residents or people at work.

### **Water Quality and Land Uses**

People expect and deserve safe water for drinking, recreation, hygiene and other uses. One of the best ways to protect the water quality of a community is to minimize the disruption of the natural water cycle.<sup>6</sup> This requires planning to consider the impact of land use decisions on the water systems. Land uses and activities such as raising animals/keeping pets or pest and weed control can have substantial impacts on water quality. Managing wastes and pathogens is vital to maintaining clean drinking water and protecting water quality.

### **Development and Diseases**

There is also concern that development into more natural areas increases health risks from exposure to wildlife disease vectors, wildfire, severe weather events, poor air quality and less-developed sanitation facilities. Air quality can be especially vulnerable in areas near highways, which generate smog.<sup>7</sup>

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<sup>4</sup> Urban and Environmental Policy Institute, Transportation and Food: The Importance of Access, 2002

<sup>5</sup> Centers for Disease Control and Prevention, Physical Activity Basics, 2018

<sup>6</sup> Centers for Disease Control and Prevention, Water Quality, 2018

<sup>7</sup> Centers for Disease Control and Prevention, Air Quality, 2018

## C. PUBLIC HEALTH PRIORITIES IN THURSTON COUNTY

### **Thurston County Board of Health**

The Thurston County Board of Health, together with the director, health officer, and staff of the Thurston County Public Health and Social Services department and partner organizations in the community, work together to define key priorities for improving the health of the public in our community.

### **Thurston Thrives is a collective impact organization that brings together community partners of Thurston County to improve the health of the community.**

Thurston Thrives was founded by the Thurston County Board of Health in 2013, aiming to address the wide array of community health factors noted above. It features several overlapping areas with the Sustainable Thurston plan. The action teams of Thurston Thrives have developed and put in motion strategies to improve our community's health. They connect to key areas of the County Health Rankings Model (Figure 11-1) and also aid the health department in meeting its mission: working together to achieve the highest level of health and well-being for everyone.

### **Public Health Priorities in Thurston County**

While immediate health priorities of our region do change over time, there are some ongoing areas of focus that find expression in the shorter-term strategic plans of Thurston County and the Public Health & Social Services Department:

In its Strategic Plan for 2019-2020, Thurston County aims to improve health outcomes for all residents, improve community health, wellness and safety, and support environmental health and climate stabilization, to name its key initiatives that refer to public health. The health department has further elaborated on these in its own strategic plan:

- Protect human health - for example: Prevent human health threats caused by contamination and environmental hazards
- Promote healthy behaviors - for example: Support prevention and treatment related to mental health and substance use
- Support well-being - for example: Prevent and reduce homelessness

Thurston County has identified three main categories of health domains that link to our community's growth and development, and thus are relevant to be included in this Comprehensive Plan:

- **Access to Medical, Dental and Behavioral Health Services**
- **Environmental Public Health, Protecting Environment and Reducing Pollution**
- **Healthy Living - Chronic Disease Prevention through Nutrition & Physical Activity Promotion and Reduced Substance Use.**

In each of these domains, the health department and multiple Thurston Thrives action teams have been working on solutions. Thurston County Public Health and Social Services has reviewed and shared data (identifying disparities in health outcomes), engaged partners and sought resources to advance equity through its programs. The agency's 2020-2024 strategic plan identifies Advancing Equity as one of five strategic focus areas. One goal in this focus area is to assess and advance equity in health and well-being in the community. Annual objectives include identification of disparities, access to care, social determinants of health, and policy and system changes to reduce disparities.



Thurston Thrives has been a valuable community arm of the effort to tackle social determinants of health. These determinants require multi-sector collaboration to improve factors such as access to health services, economic conditions and educational attainment. These domains of action are discussed further below.

In addition, a priority of public health in Thurston County is to address the crisis of homelessness. The Thurston Thrives Housing Action Team works on this issue, and the broader housing needs of Thurston County, alongside programs of the Public Health & Social Services Department. Policies regarding housing can be found in Chapter 4 – Housing of Thurston County’s Comprehensive Plan.

#### **Access to Health Services and Other Opportunities to Thrive**

Equal resources and opportunity are necessary for our community and all residents to thrive. For example, disparities in access to health care affect everybody: the individual in need, insurance companies, public funders, the public safety net, and health care providers.

Racism results in the structuring of opportunity and access by assigning value based solely on skin color and other physical characteristics. This creates unfair health disadvantages and opportunities to some individuals and communities and unfair health advantages to other individuals and communities. Systemic racism in the access to health services prevents the community as a whole from achieving optimal health for all.

Limited access to quality health services undermines people’s ability to reach their full potential and lowers their quality of life. If a community has barriers to accessing health services, its residents will suffer from:

- More disease and disability;
- Delays in receiving appropriate care;
- Inability to get preventive services;
- Preventable hospitalizations;
- More costly care; and
- Reduced life expectancy.

Clinical preventive services like screening for early evidence of disease and behavioral health conditions, when combined with communities designed to prevent chronic disease, contributes to a high-quality, effective health care system. A healthy community, moreover, is one that addresses disparities in health outcomes that often stem from inequitable conditions.

#### **Environmental Public Health - Protecting Environment / Reducing Pollution**

Environmental health is the branch of public health that is concerned with all aspects of the natural and built environment that may affect human health. Environmental health studies how environmental factors can harm human health and conducts identification, prevention and control of such effects. Environmental health professionals work to:

- Maintain a safe supply of food and drinking water;
- Discover mechanisms of diseases caused by environmental exposures;
- Treat and dispose of liquid, solid and toxic wastes;
- Reduce air, water, food, and noise pollution; and
- Control workplace hazards.

Maintaining a high standard of water quality (particularly for drinking water and surface water used for food production) is a major public health priority and responsibility. This involves sound rules and regulations to protect sources of drinking water (aquifer recharge zones and other critical areas), and shellfish harvesting areas and their associated watersheds. In addition, maintaining water quality also requires appropriate infrastructure and land use on a broader scale so that problems are addressed and costs kept in control. It is far more expensive to clean up contamination than to prevent it from occurring in the first place.

Water quality can be affected by individual or organizational behavior. This means that education, outreach and technical assistance about how to minimize, properly store and dispose of potential contaminants must be part of public health efforts.

An area of increasing concern to public health is the impact of climate change. Our community response to this issue, both adapting to it so as to lessen impacts and taking action to prevent worsening climate change, is addressed in Chapter 9 (Environment, Recreation & Open Space).

➤ SEE CHAPTER 9 – ENVIRONMENT, RECREATION AND OPEN SPACE FOR INFORMATION ABOUT CLIMATE CHANGE

### **Healthy Living - Chronic Disease Prevention through Nutrition & Physical Activity and Reduced Substance Use**

While infectious diseases remain a key focus of public health surveillance and action, diseases that result from poor diet, lack of physical activity and the use of tobacco have become much more significant in the past century in terms of impact on population health.

Obesity and overweight are precursors to long term health conditions like type 2 diabetes. The incidence of these chronic health conditions in the population of Thurston County, like the nation, has been increasing. For example, from 2007 to 2015, the percent of people with Diabetes in Thurston County increased from 19.7 to 20.6.<sup>8</sup> Over the same time, the national percent of people with diabetes increased from 25.3 to 26.5.

Many chronic health conditions are preventable, and preventing them depends on more people having good access to healthy food and physical activity. This means having plentiful healthy food environments like community gardens and farmers markets, and more surroundings that encourage physical activity like parks and trails. Thurston Thrives strategies on community design and food aim to improve community conditions in these areas to make healthy living easier for residents.

Community Design aims to create safe, convenient and abundant opportunities for physical activity by improving places, improving connections and aligning the regulatory framework toward achieving more walkable community environments. The Food area is part of a broader public private partnership called the South Sound Food System Network, whose shared vision is a thriving food system where everyone in our community enjoys and values food that is healthy, nourishing, local, affordable, culturally appropriate, sustainably produced and wisely managed.

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<sup>8</sup> Centers for Medicare & Medicaid Services, Chronic Conditions Prevalence State/County Level: All Beneficiaries by Age, 2007-2015, 2018

Tobacco use contributes to cancers, heart disease and a host of other chronic or fatal health conditions. Every year, 184 people in Thurston County are diagnosed with lung cancer.<sup>10</sup> Fortunately, this rate has been decreasing by about 2.7 cases per 100,000 people, over the last five years. The County supports efforts to prevent initiation (starting to smoke or vape), particularly by children and youth, and also tobacco cessation (quitting use of tobacco or vaping products). Thurston County benefits from the Washington State Smoking in Public Places law, passed by citizen initiative in 2005 to ban smoking in “public places” with an emphasis on workplaces (which are required to be 100% smoke free). The County supports establishing other smoke-free policies as enhancements to the Smoking in Public Places law, for example with employers and in multifamily housing.

Improper medication disposal can result in adverse and toxic effects on the environment such as water pollution. When a substance is flushed down the toilet, it becomes part of wastewater and can enter into the groundwater if you are on a septic system or some community sewer systems. Safe disposal and storage also help prevent medications from getting into the hands of people for whom they were not intended.

#### IV. THURSTON COUNTY COMMUNITY HEALTH INDICATORS

##### A. HEALTH DATA FOR DECISION MAKING

The local health department maintains extensive data and monitors health status and other indicators regarding the health of the population residing in Thurston County. This section provides summaries of data concerning the public health priority areas introduced above. While the Thurston County Comprehensive Plan is the governing land use plan for only the unincorporated areas of the county, public health serves the entire population of Thurston County, inclusive of residents within the cities. Therefore, data discussed here is for all of Thurston County, not just unincorporated areas.

However, disparities exist in Thurston County. Rural areas of the county have a lower life expectancy when compared to urban areas of the county. Nationwide, rural mortality is higher than urban mortality.<sup>11</sup> Further, the difference between urban and rural mortality is increasing.

A related issue to the urban and rural divide is income, which plays a large role in household health. Rural communities across the United States have, on average, a lower income than urban households.<sup>12</sup> Low income households are disproportionately impacted by health issues due to less access to healthy foods, medical services, transportation, and many other factors.

##### **Access to Health Services**

Rural residents and BIPOC residents (black, indigenous, people of color) often experience barriers to health care that limit their ability to obtain the services they need.<sup>13</sup> In order for rural residents

<sup>10</sup> National Cancer Institute, State Cancer Profiles Incidence Rates Tables, 2018

<sup>11</sup> Rural Health Research Gateway, Regional Differences in Rural and Urban Mortality Trends, 2017

<sup>12</sup> United State Census Bureau, A Comparison of Rural and Urban America: Household Income and Poverty, 2016

<sup>13</sup> Rural Health Information Hub, Healthcare Access in Rural Communities, 2017

to have sufficient health care access, necessary and appropriate services must be available and obtainable in a timely manner. Data from the 2019 Health Equity Community Health Assessment process identified rural residents of Thurston County as being disproportionately impacted by a wide range of health-related issues and the 2020 Racial Equity Assessment process identified health disparities in birth outcomes and treatable chronic health conditions.

Data on the prevalence of chronic health conditions for Thurston County's population indicate that there is a need for care and prevention in our community relating to these conditions.

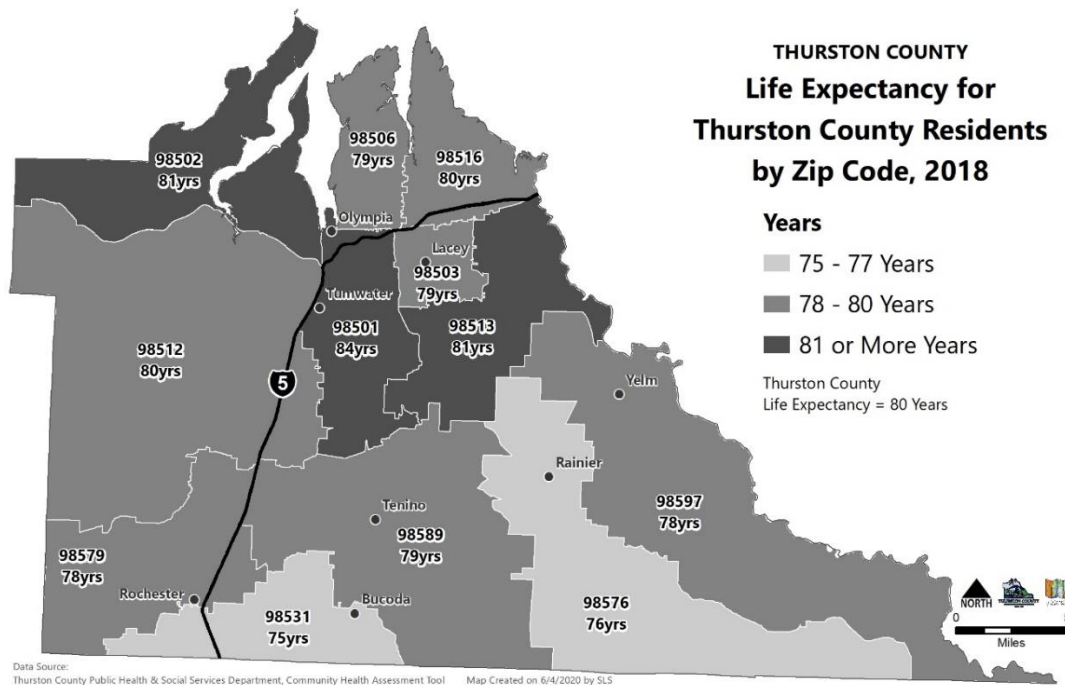


Figure 11-2. Life Expectancy, Thurston County, by Zip Code.

**SOURCE: THURSTON COUNTY PUBLIC HEALTH & SOCIAL SERVICES, 2020.**

Table 11-1. Chronic Health Conditions Requiring Medical and/or Behavioral Health Care in Thurston County.

**SOURCE: THURSTON COUNTY PUBLIC HEALTH AND SOCIAL SERVICES, HEALTHY YOUTH SURVEY, 2018, AND BEHAVIORAL RISK FACTOR SURVEILLANCE SURVEY, 2017, 2018.**

	Thurston	State
	All	All
<b>High School Youth, 10<sup>th</sup> Graders</b>		
Have Asthma	24%	21%
Are Obese	13%	14%
Have Been Depressed	40%	40%
Have Anxiety	34%	32%
Abuse Alcohol	17%	18%
Abuse Prescription Drugs	6%	7%

Abuse Prescription Pain Killers (Opioids)	4%	4%
<b>Adults</b>		
Have Asthma	9%	10%
Have Diabetes	9%	10%
Are Obese	29%	29%
Have Coronary Heart Disease or a Heart Attack	8%	6%
High Blood Pressure	28%	30%
High Cholesterol	31%	30%
Diagnosed with Depressive Disorder	22%	23%

### Groundwater & Public Health

Thurston County residents rely almost exclusively on groundwater as their potable water source. Potable water is water that is safe for drinking. As of December 2017, there are approximately 543 Group B<sup>14</sup> (2-14 service connections or serving a population of less than 25/day) and 303 Group A<sup>15</sup> (15 or more service connections or serving 25 or more people/day for 60 or more days per year) active public water systems in Thurston County.

While groundwater quality is generally very good, pollution from land use activities has significantly affected water quality in some areas. Nitrate in people's food or water reduces the ability of red blood cells to carry oxygen, with more serious health effects for infants (methemoglobinemia or "blue baby syndrome"). Background nitrate concentrations in groundwater should be less than 2.0 mg/l. The maximum amount of nitrate allowed in county drinking water is 10 milligrams per liter (mg/l).

In 2018, elevated nitrate concentrations were found in groundwater samples in many areas across Thurston County<sup>16</sup>. Elevated nitrate levels in groundwater indicates pollution from land use activities including agricultural activities, and practices, land management activities, and sewage disposal methods including on-site sewage systems and reclaimed water infiltration. Elevated nitrate concentrations are the typically the result of nearby, up-gradient land use activities. Nitrate can also act as an indicator of other pollution sources – the presence of nitrate may suggest the presence of other pollutants.

<sup>14</sup> Washington State Department of Health, Water System Data for Download Group B General, 2017

<sup>15</sup> Washington State Department of Health, Water System Data for Download Group A General, 2017

<sup>16</sup> Thurston County, GeoData, 2018



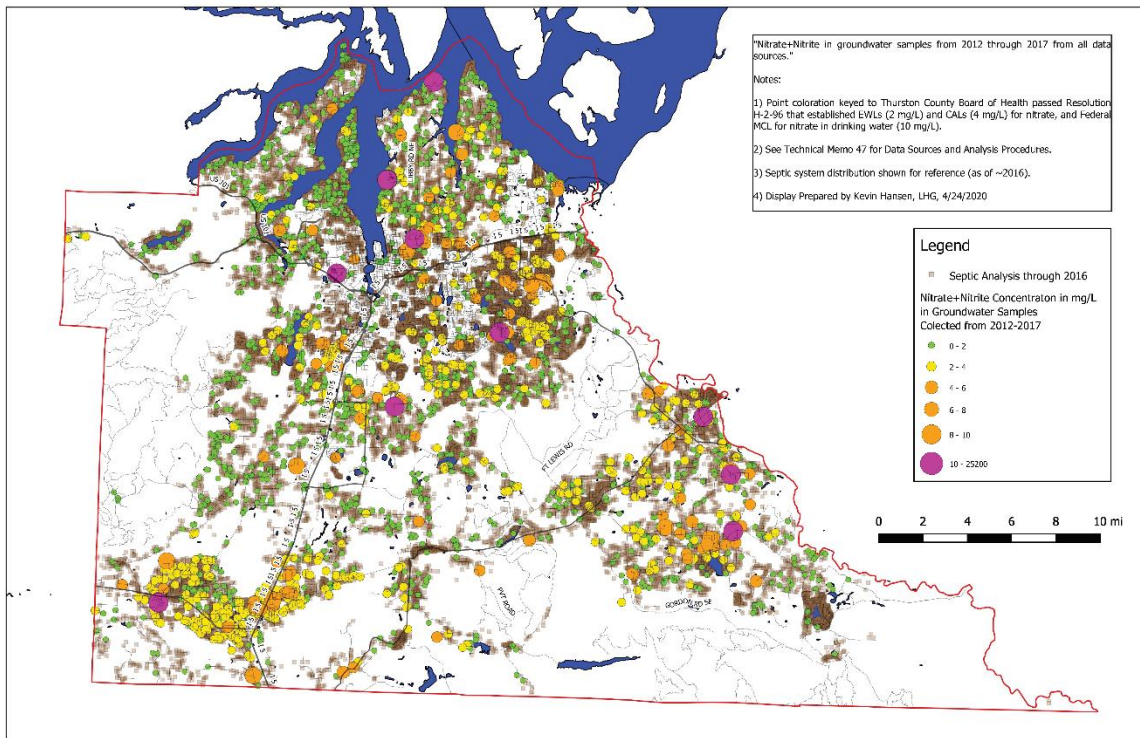


Figure 11-3. Nitrate and Nitrite Groundwater Concentrations at Locations in Thurston County, 2012-2017.

SOURCE: THURSTON COUNTY COMMUNITY PLANNING & ECONOMIC DEVELOPMENT, APRIL 2020.

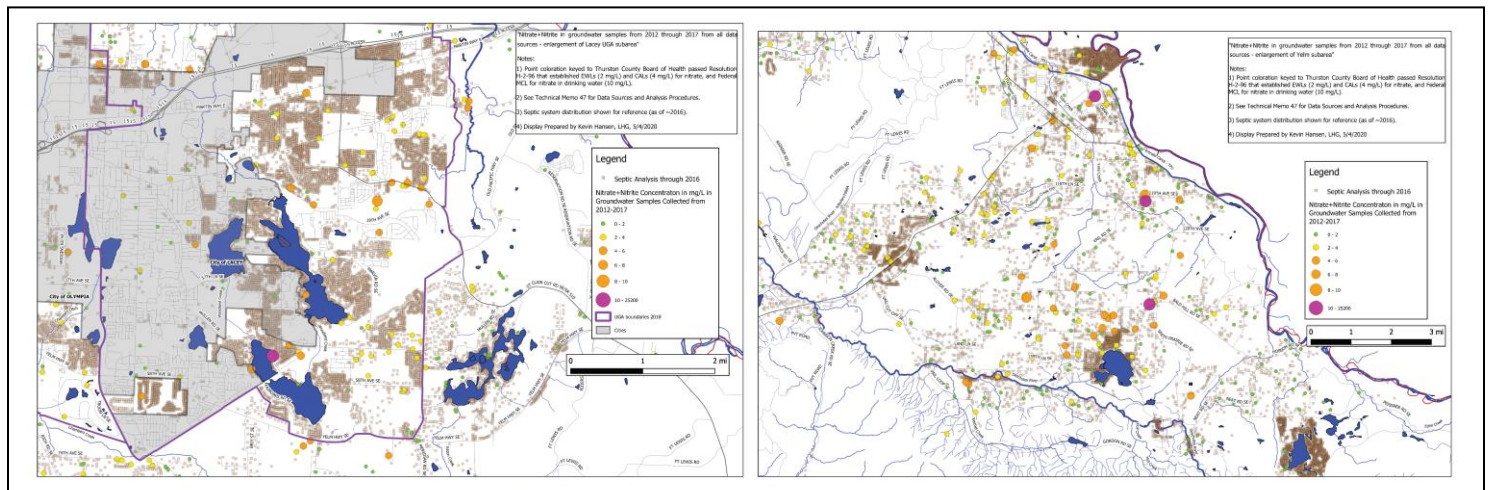


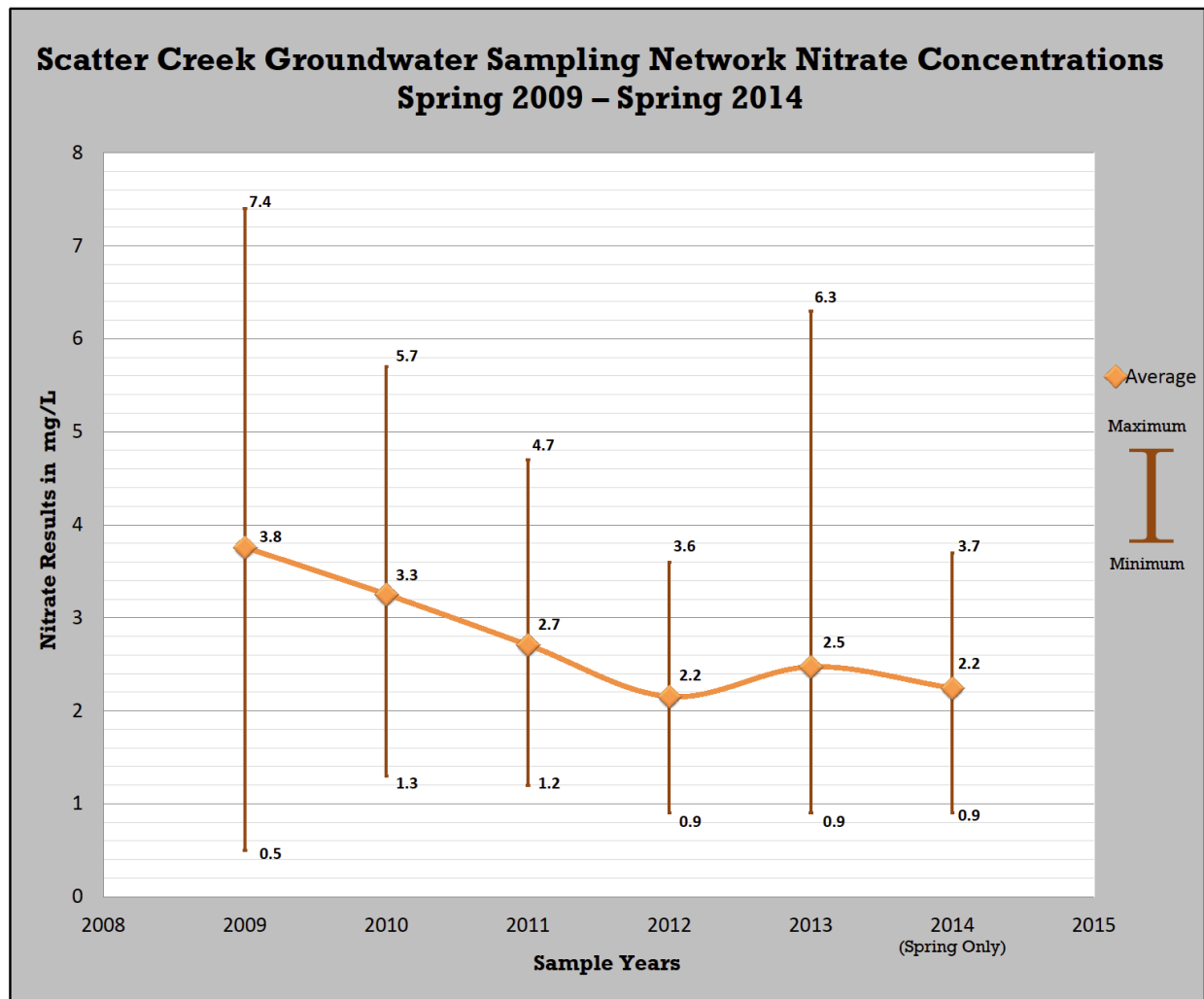
Figure 11-4. Nitrate and Nitrite Groundwater Concentrations, South Lacey UGA and Yelm Areas, 2012-2017.

SOURCE: THURSTON COUNTY COMMUNITY PLANNING & ECONOMIC DEVELOPMENT, APRIL 2020.

The Scatter Creek Aquifer is an example of urban density and septic challenges. The Scatter Creek Aquifer is a shallow, unconfined, extremely vulnerable groundwater supply and is the sole source of drinking water for more than 18,000 area residents. The aquifer flows from Tenino westward to Grand Mound and Rochester, and then south to Lewis County. Past sewage disposal practices and land use activities have resulted in elevated levels of nitrate and fecal coliform, violations of drinking water standards, increased public health risks, and water quality degradation. Nitrate



values ranged from a high of 7.8 mg/l to a low of 1.7 mg/l in the 120 samples collected Sampling conducted September 2008 through June 2009. See Figure 11-5.



*Figure 11-5. Scatter Creek Groundwater Nitrate Study.*

**SOURCE: THURSTON COUNTY PUBLIC HEALTH AND SOCIAL SERVICES, SCATTER CREEK AQUIFER, 2009-2014.**

From 2011 – 2014 a citizen advisory committee evaluated the risks to the Scatter Creek Aquifer posed by on-site sewage systems under six different land use scenarios from a groundwater model. The citizen committee looked at the data showing decreasing nitrogen levels in the groundwater in samples taken 2009-2014, together with the model results, and recommended zoning, land use and health regulations (such as the placement of septic systems and wells) as the best ways to minimize drinking water supply contamination.

The citizen committee concluded that while the aquifer is vulnerable to contamination from septic systems and land use activities, sampling from 2009-2014 show nitrogen levels in the aquifer have decreased over time and seem to be trending lower. They believe zoning, land use, and health regulations generally have protected the aquifer from nitrates and many other contaminants, but

that regulations can be strengthened to minimize the potential for contaminating drinking water supplies through the optimal placement of new septic systems and wells.

### **Surface Waters - Marine**

Commercial shellfish harvesting takes place along Thurston County shorelines in Totten Inlet, Eld Inlet, Henderson Inlet, Dana Passage and along the Nisqually Reach. There are approximately 12,825-acre commercial shellfish harvesting areas in Thurston County (using 2016 as base year). Consumer health is protected by regulations overseen by the Washington State Department of Health. Overall water quality conditions for fecal coliform improved from 2008 to 2016 so that harvesting restrictions were lifted on 472 acres of commercial shellfish harvesting areas. While water quality improvements were documented in Henderson Inlet and Nisqually Reach, portions of those areas are closed to shellfish harvesting due to pollution. Parts of Eld Inlet have experienced declining water quality trends. Both Eld Inlet and Henderson Inlet have been placed on the Washington State Department of Health Water Quality Early Warning System Report and in 2018 30 acres of Henderson Inlet were downgraded due to declining water quality. In response to the downgrade the Thurston County Board of County Commissioners adopted the Henderson Inlet Closure Response Plan on June 25, 2019. This downgrade shows that continued efforts are necessary to protect and improve water quality.

Marine waters in Thurston County are subject to harmful algal blooms, which produce biotoxins and can impact public health. Elevated toxin levels can cause Diarrhetic Shellfish Poisoning, Paralytic Shellfish Poisoning, and Amnesic Shellfish Poisoning. Other contaminants, such as Polychlorinated biphenyls (PCBs), and mercury have contaminated fish. Consequently, the Department of Health has issued advisories that recommend people limit how much fish they consume that is harvested from the South Sound. Recommendations vary from no consumption of flat fish harvested in Budd Inlet to 2-3 servings per week of chum, Coho, pink and sockeye salmon caught in these waters.

These waters are impacted by nonpoint sources of pollution (see Chapter 9), and affect aquatic life and public health.

### **Surface Waters - Freshwater**

Water quality is regularly monitored in Thurston County. Water quality indicators show that our lakes vary from having oligotrophic (Summit Lake) to eutrophic conditions (Capitol Lake and Pattison Lake). Oligotrophic lakes are associated with “good” water quality, ones in which people like to swim and recreate. The most eutrophic lakes have poor water clarity and tend to have frequent and/or prolonged algae blooms.

Algae blooms occur regularly on many Thurston County lakes. Some blue-green algae produce substances toxic to nerves (neurotoxins) and the liver (hepatotoxins), as well as toxins that affect the skin and gastrointestinal tract. Blue-green algae have produced toxin at levels of public health concern in many Thurston County lakes. In 2017 anatoxin-a, a potent neurotoxin, was detected at concentrations of 354 ug/l in one lake. The public health level of concern is 1.0 ug/l.

### **On-site Sewage Systems**

There are approximately 54,172 on-site sewage (septic) systems that generate almost 12 million gallons of sewage each day in Thurston County. While properly designed, constructed and maintained on-site sewage systems (OSS) provide a safe and efficient way to treat and dispose of

domestic waste water, OSS that are failing, improperly used, situated in high density or sensitive environmental areas can generate significant levels of pollution that pose public health and environmental concerns. Failing on-site sewage systems in Thurston County have contributed to commercial shellfish area closures and significant levels of ground water pollution. In some cases, a failing OSS can result in sewage that surfaces above ground; this poses an immediate threat to people who come in contact with it. Properly functioning on-site septic systems have also been shown to contribute to elevated nitrate and fecal coliform levels in groundwater and surface waters due to higher-density developments relying on OSS for wastewater treatment and environmental conditions such as porous soils.

There are an estimated 16,744 septic systems within the city limits of Lacey, Olympia, and Tumwater and their associated urban growth areas. These release more than 3.5 million gallons of liquid sewage each day. The cumulative result of urban septic systems is significant volumes of largely untreated effluent flowing unimpeded through the area's porous soils to groundwater aquifers and, eventually, to surface waters. While septic system effluent represents about 20% of the volume of all local wastewater, it contains roughly 75% of the total nitrogen loading from wastewater. This contamination threatens water supplies and has led to the abandonment of some drinking water wells.

The Environmental Health Division is responsible for reviewing and permitting the installation and repair of OSS with design flows of 3,500 gallons per day or less. Permits are reviewed to ensure compliance with Article IV of the Thurston County Sanitary Code and WAC 246-272A. These regulations require the sewage systems to meet system site, soil and installation standards.

WAC 246-272A requires the OSS owner to take steps to ensure it is properly monitored and maintained to help keep it from failing. Thurston County augments state law by requiring renewable certificates (permits) for OSS that are large, complex or serve food service establishments. Renewable certificates for on-site sewage systems are also required in the Henderson Inlet and Nisqually Reach Marine Recovery Areas, where OSS were found to be significant pollution sources. There are 11,347 OSS in Henderson and Nisqually, and another 4,059 other OSS throughout the rest of the county, that are required to have renewable operational certificates. Eighty seven percent of these systems have current inspections and are in compliance with operational certificate standards. This compares favorably to the remaining septic systems in the county which have far fewer inspections recorded. For the OSS that do not have renewable operational certificates, approximately 35% have been inspected in the last 3 years based on a review of reports filed with the county. This does not include inspections completed by OSS owners who chose not to file with nor report to the county.

The inspection program helped identify septic system problems. From 2007-2015 there were 311 permitted repairs, and 1,486 minor repairs. Minor repairs are things like cracked pipes and broken septic tank baffles that can cause sewage to surface or cause a system to fail prematurely. The program contributed to water quality improvements that have resulted in a net gain of 366 areas of commercial shellfish harvesting area in Henderson Inlet since 2005 and the improvements noted in the 2017 *Henderson Inlet Fecal Coliform Total Maximum Daily Load Water Quality Effectiveness Monitoring Report*.

**Hazardous and Solid Waste**

Thurston County is home to many businesses and industries that use and store hazardous materials or wastes. Since 2000, the County's hazardous waste program staff has assisted over 1,800 businesses with the management, recycling, and disposal of their hazardous materials. Industry-specific campaigns have enabled the County to provide education about best management practices that includes product substitution, treatment options, new recycling techniques, and removal of hazardous and extremely hazardous chemicals from local schools.

There are many sites contaminated by hazardous material in Thurston County. On July 2017 there were 157 sites in Thurston County identified by the Department of Ecology and included on either the Washington State Confirmed and Suspected Contaminated Sites List or the Leaking Underground Storage Tanks (LUST) List. This compares to 193 in October 2009 and 179 in December 2019.<sup>17</sup> The size and significance of these sites vary from ones like the former Cascade Pole that will take many years and millions of dollars to correct to leaky tanks at former service station sites and small home businesses.

In addition to contaminated sites and LUSTs, there are many other sources of hazardous waste created in everyday life. In 2008, a survey conducted by Public Health & Social Services Dept. showed that an estimated 96% of Thurston County adults used chemical products around their home such as weed killers, bug sprays and household cleaners. Of county adults that used household chemical products, 27% never or only sometimes familiarized themselves with the health effects of the product and 10% acknowledged that they do not follow directions for use.<sup>18</sup> While the impact of a single household may not be much, when many households conduct improper hazardous waste management the total affect can be significant.

In addition to hazardous waste, various types of solid waste must also be managed. In 2019, Thurston County Public Health and Social Services permitted six public solid waste facilities, including the Thurston County Waste and Recovery Center, HazoHouse, and three county-owned transfer stations. Nine privately-owned facilities were also permitted, including the Silver Springs Organics composting facility. Thurston County is responsible for regulating the materials that these facilities handle, including the small quantities of hazardous materials or wastes associated with small businesses and households. A more complete discussion of regulation for these materials and wastes can be found in the Thurston County Hazardous Waste Management Plan.

**Air Quality**

Thurston County's air quality generally meets standards for good health, though there are events that sometimes create unhealthy conditions, particularly for sensitive groups. The incidence of asthma, which has many triggers in the home and community environment, is higher than the state average both among adults and young people.

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<sup>17</sup> Washington State Department of Ecology, Site Register & Contaminated Sites Lists, Toxic Cleanup Program Web Reporting, 2018

<sup>18</sup> TCPHSS; Perception and Practice - Environmental Factors and Lifestyle Choices Survey 2008.

Table 11-2. Environmental Public Health Concerns among Youth and Adults, Thurston County and Washington State.

**SOURCE:** THURSTON COUNTY PUBLIC HEALTH AND SOCIAL SERVICES, PERCEPTION AND PRACTICE – ENVIRONMENTAL FACTORS AND LIFESTYLE CHOICES SURVEY 2008, HEALTHY YOUTH SURVEY, 2018, BEHAVIORAL RISK FACTOR SURVEILLANCE SURVEY, 2018, COMPREHENSIVE HOSPITALIZATION ABSTRACT REPORTING SYSTEM AND DEATH CERTIFICATES, 2016-2018.

	Thurston	State
	All	All
<b>6<sup>th</sup> Graders</b>		
Have Asthma	14%	13%
<b>8<sup>th</sup> Graders</b>		
Have Asthma	18%	18%
<b>10<sup>th</sup> Graders</b>		
Have Asthma	24%	21%
<b>Adults</b>		
Have Asthma	9%	10%
Have Coronary Heart Disease or a Heart Attack	8%	6%
Have Had a Stroke	3%	3%
Number of Heat Stress Deaths or Hospitalizations	7	170

### Healthy Living – Chronic Disease Prevention

Nutrition plays a vital role in the prevention of chronic disease. Early nutrition habits are especially important because the early years of a child's life influences their lifelong food choices. Once established, eating patterns can be difficult to modify. Children prefer foods that they are used to eating with their family. The food choices of adults have a significant influence on their health and a wide range of chronic conditions. Food choices are influenced by many factors.

There is a direct correlation to low income households and access to healthy foods.<sup>19</sup> People working multiple minimum wage jobs may not have the time or income to eat a healthy meal, which increase the risk of health-related issues. As such, community health is affected by Economic Development (Chapter 8). This is another example of how health is tied to other planning elements.

<sup>19</sup> Urban Institute & VCU Center on Society and Health, How Are Income and Wealth Linked to Health and Longevity, 2015

Table 11-3. Nutrition Patterns among Youth and Adults, Thurston County and Washington State.

**SOURCE: THURSTON COUNTY PUBLIC HEALTH AND SOCIAL SERVICES, HEALTHY YOUTH SURVEY, 2018, AND BEHAVIORAL RISK FACTOR SURVEILLANCE SURVEY, 2017.**

	Thurston	State
	All	All
<b>6<sup>th</sup> Graders</b>		
Eat Breakfast	78%	76%
Eat Dinner with Family	77%	75%
<b>8<sup>th</sup> Graders</b>		
Eat Breakfast	65%	65%
Eat Dinner with Family	66%	67%
Drink Regular Pop/Soda (not diet)	76%	75%
Consume Recommended amount of Daily Fruit and Vegetables	19%	19%
<b>10<sup>th</sup> Graders</b>		
Eat Breakfast	57%	59%
Eat Dinner with Family	58%	56%
Drink Regular Pop/Soda (not diet)	77%	73%
Consume Recommended amount of Daily Fruit and Vegetables	16%	17%
<b>Adults</b>		
Consuming Fruit At least Once Daily	63%	68%
Consuming Vegetables At least Once Daily	87%	83%

### Physical Activity

Life-long health attitudes and behaviors are typically formed during adolescence. Physical activity during adolescence has been shown by research to provide a range of immediate and long term benefits including: promoting psychological well-being by reducing feelings of depression and anxiety; affecting weight which connects to development of certain chronic health conditions like obesity, high blood pressure and diabetes. Local decisions and investments that improve the walkability and bicycle-friendliness of Thurston County can positively contribute to the level of physical activity among county residents.



Table 11-4. Physical Activity among Youth and Adults, Thurston County and Washington State.

SOURCE: THURSTON COUNTY PUBLIC HEALTH AND SOCIAL SERVICES, HEALTHY YOUTH SURVEY, 2018, AND BEHAVIORAL RISK FACTOR SURVEILLANCE SURVEY, 2017.

	Thurston	State
	All	All
<b>6<sup>th</sup> Graders</b>		
Walk or Bike to School	23%	34%
Engage in the Recommended Amount of Physical Activity	29%	27%
<b>8<sup>th</sup> Graders</b>		
Walk or Bike to School	31%	38%
Engage in the Recommended Amount of Physical Activity	32%	28%
<b>10<sup>th</sup> Graders</b>		
Walk or Bike to School	30%	38%
Engage in the Recommended Amount of Physical Activity	24%	22%
<b>Adults</b>		
Engage in the Recommended Amount of Aerobic Physical Activity	54%	58%

### Tobacco Prevention

Tobacco is the leading preventable cause of death for Thurston County residents. Tobacco products contain nicotine, a chemical that causes addiction. Of county adults that currently smoke cigarettes, 56% are trying to quit. <sup>7</sup>

Table 11-5. Tobacco use among Youth and Adults, Thurston County and Washington State.

SOURCE: THURSTON COUNTY PUBLIC HEALTH AND SOCIAL SERVICES, HEALTHY YOUTH SURVEY 2018, BIRTH CERTIFICATES, 2018, AND BEHAVIORAL RISK FACTOR SURVEILLANCE SURVEY, 2017, 2018.

	Thurston	State
	All	All
<b>6<sup>th</sup> Graders</b>		
Smoke Cigarettes	1%	1%
Use Vapes (E-Cigarettes)	2%	3%
<b>8<sup>th</sup> Graders</b>		
Smoke Cigarettes	3%	3%
Use Vapes (E-Cigarettes)	11%	10%
<b>10<sup>th</sup> Graders</b>		
Smoke Cigarettes	6%	5%
Use Vapes (E-Cigarettes)	21%	21%
<b>Adults</b>		
Smoke Cigarettes During Pregnancy	9%	7%
Smoke Cigarettes	12%	12%
Use Vapes (E-Cigarettes)	21%	20%

**Second Hand Smoke**

Secondhand smoke from tobacco products has been scientifically shown to cause premature death and disability by increasing a person's risk for a range of cancers, heart disease and respiratory problems. The proportion of local youth being exposed to secondhand smoke is a significant health concern.

*Table 11-6. Secondhand Smoke Exposure among Youth, Thurston County and Washington State.*

**SOURCE: THURSTON COUNTY PUBLIC HEALTH AND SOCIAL SERVICES, HEALTHY YOUTH SURVEY, 2018.**

	Thurston	State
	All	All
<b>6<sup>th</sup> Graders</b>		
Exposed to Secondhand Cigarette Smoke	18%	18%
<b>8<sup>th</sup> Graders</b>		
Exposed to Secondhand Cigarette Smoke	22%	22%
<b>10<sup>th</sup> Graders</b>		
Exposed to Secondhand Cigarette Smoke	27%	24%

## V. GOALS, OBJECTIVES AND POLICIES

### GOAL 1: INCREASE ACCESS TO MEDICAL, BEHAVIORAL, AND ORAL HEALTH SERVICES.

**OBJECTIVE A:** The County should increase access to appropriate medical, behavioral and oral health services.

**POLICIES:**

1. The County should support strategies to expand access to no cost or reduced cost primary care services and oral health services for uninsured or underinsured individuals and disproportionately impacted groups including residents who are Native or from the U.S. territories.
2. The County should partner with local service providers to improve access to behavioral health and prevention services for all, but especially for low-income and disproportionately impacted groups.
3. The County should explore opportunities to strengthen service delivery in locations serving disproportionately impacted groups, including the unhoused, BIPOC (black, indigenous, people of color) and rural residents.
4. The County should support partnerships that promote access to prescribers and affordable prescription medication for chronic health conditions and behavioral health disorders.

5. The County should support partnerships that promote access to preventive and restorative dental care.
6. The County should support access to care and services that support a healthy start in life for newborns and infants, with the extra support for Black or African American and Native American women and families.
7. The County should support efforts to reduce health disparities resulting from differential access to care among all residents, especially those who are children, low-income or identify as LGBTQ and BIPOC (black, indigenous, people of color).
8. The County should support partnerships that work to eliminate health disparities or avoidable differences between groups of people created by societal barriers and systematic exclusion from access to medical, behavioral and oral health services opportunities.
9. The County should support partnerships that promote racial equity and work to eliminate racism and systemic racism as a source of negative physical and behavioral health conditions.

**OBJECTIVE B:** The County should strengthen collaboration with local jurisdictions, funding partners and community partners to build and sustain coordinated regional health and human services to provide access to services, safety and clinical care to those most in need.

**POLICIES:**

1. The County should continually work with regional jurisdictions and organizations to identify strengths and weaknesses of existing health and human services.
2. The County should collaborate with regional jurisdictions and organizations to assure coordination in how funds are used, and continue to explore improvements to system design, contracting, data collection and analysis.
3. The County should be a regional leader in ensuring safety net or equivalent access related to all types of care and supportive services, behavioral, physical, etc., to serve the whole person and all people.
4. The County should assess and measure the health and needs of Thurston County's residents on an ongoing basis and modify strategies to respond to changing needs, outcomes, and new research.
5. The County should increase collaboration related to communicable disease control.

**GOAL 2: IMPROVE AND PROTECT AIR QUALITY TO REDUCE AIR BASED HEALTH HAZARDS.**

**OBJECTIVE A:** The County should attain a high level of air quality to ensure a reduction in adverse health impacts.

**POLICIES:**

1. The County should continue to work to meet federal and state air quality requirements.

2. The County should encourage use of clean heating sources to decrease air pollution.
3. The County should provide information to the public on proper use of wood stoves.
4. The County should develop land use practices which improve air quality, including infill development and concentrating high density land uses which reduce vehicle trips.
5. The County should encourage development and implementation of transportation-based strategies that reduce pollutants, smog, and diesel air-toxins.
6. The County should protect and enhance tree canopy across urban and natural forests to improve air quality.
7. The County should support partnerships to reduce health disparities resulting from air quality and air-based health hazards among all residents, especially those who identify as BIPOC (black, indigenous, people of color).

**OBJECTIVE B:** The County should coordinate air quality improvement efforts with agencies and jurisdictions to monitor transportation demand management programs benefits, share technical information on air quality, and integrate land use and transportation policies.

**POLICIES:**

1. The County should coordinate with local agencies, jurisdictions and regional partners to especially high priority areas for air quality such as schools and retirement homes.
2. The County should coordinate with local agencies and jurisdictions to develop transportation control measures and similar mobile source emission reduction programs that may be warranted to attain or maintain air quality health standards.
3. The County should coordinate with agencies to provide information on air quality problems and measures to improve air quality.

**GOAL 3: PROTECT AND PRESERVE WATER QUALITY AND DRINKING WATER SUPPLIES.**

**OBJECTIVE A:** Water supplies should be protected with regulations and monitored for quality.

**POLICIES:**

1. The County should assure groundwater resources (aquifers) are protected from land use activities and development.
2. The County should assure public water supplies are properly managed and monitored wells produce safe, clean drinking water.
3. The County should evaluate regional water quality to identify public health risks.
4. The Thurston County Sanitary Code should include standards that ensure new and replacement on-site sewage systems are properly designed, constructed and maintained to reduce risks to public health and surface water resources.

5. The County should explore conditioning the approval of land use and development permits so they do not adversely affect ground and surface water quality. Proposals should be evaluated for physical, biological and chemical impacts, including pesticides, toxic materials and chemicals of emerging concern.
6. The County should work to keep current on the risks to ground and surface water resources posed by human activities and update its rules and policies to manage these risks to protect public health and the environment. Rules and policies should be developed with special attention to Chapter 9 (Environment, Recreation, and Open Space) to ensure environmental policies are in sync.
7. The County should encourage releasing adequately treated recycled water into streams (rather than the ocean) to increase water quality, especially when water quality impacts shellfish beds.
8. The County should support partnerships to reduce health disparities resulting from poor drinking water supplies among all residents, especially those who identify as BIPOC (black, indigenous, people of color).

#### **GOAL 4: ENSURE WASTES ARE PROPERLY MANAGED TO PROTECT PUBLIC HEALTH AND WATER RESOURCES.**

**OBJECTIVE A:** Land use activities and planning programs should be supported that promote best management practices for the safe installation, use, and clean-up for septic and sewage systems.

##### **POLICIES:**

1. The County should work to ensure on-site sewage systems in urban communities that cause significant groundwater pollution or pose significant public health risk are converted to sewer.
2. The County should ensure that septic systems are properly monitored and managed and failing systems are identified and promptly repaired.
3. The County should ensure that wastes are managed so as to protect groundwater resources.
4. The County should investigate and respond to complaints and take enforcement action as needed to assure solid and hazardous wastes are properly managed.
5. The County should permit solid waste facilities and assure they comply with permit conditions and applicable law to assure wastes are properly managed.
6. The County's procurement practices should reflect the goal of reducing the generation of hazardous materials as much as possible.

**OBJECTIVE B:** Land use activities and planning programs should conduct outreach for the safe management of septic systems, sewage systems, solid wastes and hazardous.

##### **POLICIES:**

1. The County should work with businesses (small quantity generators) to improve compliance with rules for proper handling and disposal of hazardous materials.

2. The County should provide information about health and environmental hazards associated with household products. Information about safer or lower-risk products should also be provided.
3. The County should provide education about the health impacts of improperly disposing of hazardous materials such as herbicides, paints, pesticides, unused medicines, used motor oil, etc.
4. The County should support product stewardship advocacy, programs and legislation to reduce the health and environmental impacts of consumer products in their generation, consumption, storage and disposal. Part of this support should include providing information to the public about the importance of product stewardship.
5. The County should conduct outreach to bring better understanding of environmental health and ways to protect air and water quality to members of the community/Thurston County residents.

**GOAL 5: IMPROVE NUTRITION BY PROMOTING HEALTHY AND ACCESSIBLE FOOD OPTIONS FOR ALL LOCAL RESIDENTS.**

**OBJECTIVE A:** The County should increase the access to healthful foods in communities, including provision of full service grocery stores, farmers markets, and community gardens.

**POLICIES:**

1. The County should implement farm to institution strategies.
2. The County should ensure that land use rules allow for farmers markets.
3. The County should provide incentives for new grocery store development in areas where grocery stores are lacking.
4. The County should ensure that land use rules allow community gardens.
5. The County should facilitate the availability of locally grown, healthy food options for residents.
6. The County should continue to collaborate with local partners to promote community gardens.
7. The County should support education programs that teach youth and adults skills and behaviors to choose and prepare healthful foods.
8. The County should support programs that increase market access for rural agriculture, such as Community Supported Agriculture, farm-to-table projects, etc.
9. The County should support partnerships to reduce health disparities resulting from lack of access to healthful food options among all residents, with particular attention to those who identify as BIPOC (black, indigenous, people of color).



**GOAL 6: CREATE ENVIRONMENTS AND SERVICES FOR ACTIVE LIVING THAT INCREASE PHYSICAL ACTIVITY.**

**OBJECTIVE A:** The County should increase access to free or low-cost recreational opportunities for physical activity.

**POLICIES:**

1. The County should support creation or enhancement of access to places for physical activity combined with informational outreach activities (examples include walking paths, exercise facilities indoors, improved access to nearby facilities, wayfinding signs, and point-of-decision prompts to encourage use of stairs).
2. The County should promote policies to enhance physical activity opportunities at worksites, including healthcare and school settings.

**OBJECTIVE B:** The County should support urban planning approaches - zoning and land use – that promote physical activity.

**POLICIES:**

1. The County should promote increasing density of land use and mix of uses in urbanized, or urbanizing, areas to create more walkable community environments.
2. The County should promote design that increases proximity of residential areas to stores, jobs, schools and recreation areas in urbanized or urbanizing areas.
3. The County should promote children's health by encouraging and supporting land uses in the environment surrounding a school and on travel routes to schools that complement and strengthen other formal programs, such as Safe Routes to School.
4. The County should promote walkable neighborhoods to support safe and accessible walking through adequate development density, diverse uses, and safe design.

**OBJECTIVE C:** The County should emphasize complete streets and community design for increased physical activity and active transportation.

**POLICIES:**

1. The County should build, and require of new developments, connections among trails, paths, neighborhoods and schools, and sidewalks to increase access to opportunities to be physically active.
2. The County should collaborate with the Thurston region's community development, planning and transportation departments to ensure that activity-friendly and universal design principles are incorporated into local plans, development codes and design review processes.
3. The County should promote, and provide facilities to support, active commuting to schools and worksites located in Thurston County.
4. The County should consider the establishment of a non-motorized transportation citizen committee that will advise on improvements to roadways and trails that make it easier to walk, bicycle or otherwise be active in meeting transportation needs.

5. The County should address the unique challenges of promoting access to physical activity opportunities in rural areas where roadway infrastructure and land use is not generally supportive of walking or bicycling.

**OBJECTIVE D:** The County should enhance the safety and perceived safety of communities to increase the likelihood that residents will use walkable or bicycle friendly places, whether for active transportation or recreation. Rules and policies should be developed with special attention to Chapter 5 (Transportation).

#### **POLICIES**

1. The County should participate in traffic safety and injury prevention efforts with attention to improving physical activity opportunities.
2. The County should support Safe Routes to School projects and other efforts to address safety problems and barriers to physical activity among vulnerable populations (such as inaccessible or hazardous street crossings, poor school siting or design).
3. The County should establish design guidelines and rules that result in improved safety and comfort for people bicycling, walking or engaging in other physical activity.

### **GOAL 7: IMPROVE COMMUNITY HEALTH BY REDUCING SUBSTANCE ABUSE**

**OBJECTIVE A:** The County shall enforce the Washington State Smoking in Public Places law and seek to strengthen it in local implementation.

#### **POLICIES:**

1. The County should provide education to business owners regarding the Smoking in Public Places law.
2. The County should work with local law enforcement and other partners to help ensure compliance with the Smoking in Public Places law.
3. The County should collaborate with other local jurisdictions (cities and towns) to enforce and strengthen the Smoking in Public Places law.

**OBJECTIVE B:** The County should support the development of smoke- and vapor- free policies for housing, workplaces, and other community locations.

#### **POLICIES:**

1. The County should encourage apartment owners and managers to adopt smoke-free and vapor-free policies, providing information and resources to assist them.
2. The County should provide information to the public about smoke-free and vapor-free housing.
3. The County should encourage policies that lead to all parks, transit facilities and services, and public housing to become smoke, tobacco- and vapor-free.
4. The County should support smoke-, tobacco- and vapor-free work sites and promote policies that ensure this shift.

**OBJECTIVE C:** The County should support community-based approaches that address the health, social, economic, environmental and other negative consequences associated with substance use for all residents, especially those who identify as BIPOC (black, indigenous, people of color).

**POLICIES:**

1. The County should support implementation of evidence-based (i.e., from scientific evidence) strategies that reduce the harm associated with substance use, misuse, abuse and dependency.
2. The County should collaborate with partners to provide fact-based drug education to residents, disproportionately impacted groups and community stakeholders.
3. The County should promote safe disposal and storage of unused or expired prescription medications to prevent misuse and abuse.
4. The County should collaborate with partners to offer evidence-based alternatives that reduce school discipline or justice involvement, when that involvement is connected to a substance use disorder.

The County should partner to offer services that increase protective factors (conditions that reduce or eliminate risk) and resilience (ability to recover quickly) among local youth and families as a means to prevent substance use.